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EXAMINER	
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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 17

Application Number: 09/777,510
Filing Date: February 06, 2001
Appellant(s): BOGAERT ET AL.

Holly D. Kozlowski
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 9 January 2004.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

Appellant's brief includes a statement that claims 1-19, 25-34 and 48-50 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

6,106,553	Feingold	8-2000
6,092,899	Wanders	7-2000
4,414,694	Choyce	11-1983

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-19, 25, 29-34 and 48-50 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Feingold in view of Wanders.

Feingold teaches the conventional concave intraocular lens. It includes a centrally located optical part and a peripherally located supporting element. It would appear throughout the drawings that the concave posterior surface of the optical part and support element together

are "part of a non-spherical surface that is rotation symmetric around the optical axis of the optical part, wherein the intersection between said non-spherical surface and any plane containing the optical axis represents a flawless curve free from discontinuities and points of inflection". For example figure 1 appears to show a concave surface free from discontinuities and points of inflection. Note the radius of curvature arc SRi. Again in figure 4, the posterior surface would appear to be of one continuous surface free of discontinuities as noted by Sri. Same would apply to figures 8 and 11 and the continuous surface SRi. SRo in the drawings should be pointing to the outer surface or the SRfr2(SRo). Figures 16 and 23 would also appear to show a concave posterior surface free from discontinuities.

While Feingold may not specifically recite that the surface is free from discontinuities it would appear that an effort has been made to make the posterior surface free of discontinuities. The curvature in the drawings would appear to consistently show that while the thickness of the lens varies, it is the upper anterior surface of the lens that varies in height not the posterior surface. The posterior surface remains unaffected by the variations in thickness. Moreover, Feingold teaches in column 2 line66-column 3 line 3, "It is desirable to place the intraocular lens in a position with respect to the natural lens that minimizes contact between surfaces of the implanted lens and the natural crystalline lens to reduce the risk of cataracts." Feingold teaches appellant's critical feature of the posterior surface of the lens not to come into contact with the natural lens. Appellant's problem is recognized in the art and has inherently already been solved.

If it is felt that Feingold doesn't teach a concave posterior surface free from discontinuities then Wanders is cited to teach that discontinuities between sections of the lens

should be avoided. "[T]he transition between the distance part with radius R_v and the reading part with radius R_l is particularly gradual" and "image discontinuity and reflection will be avoided" (column 6, lines 15-19). It is well recognized in the art to avoid abrupt changes in the surface of the lens because of the light refraction. Wanders provides a sooth transition between sections of the lens to avoid image discontinuity and reflections. Such is well known to the artisan of ordinary skill. While Wanders is not doing it for the same purpose as applicant's invention it still teaches that it is important to provide a lens surface free of discontinuities and points of inflection. Moreover, as long as some motivation or suggestion to combine the references is provided by the prior art taken as a whole, the law does not require that the references be combined for the reasons contemplated by the inventor. See *In re Beattie*, 974 F.2d 1309, 24 USPQ2d 1040 (Fed. Cir. 1992); *In re Kronig*, 539 F.2d 1300, 190 USPQ 425 (CCPA 1976) and *In re Wilder*, 429 F.2d 447, 166 USPQ 545 (CCPA 1970).

Regarding claims 9-19, the specific dimensions of the lens are an obvious consideration dependent on specific practical intended use parameters well within the realm of the artisan of ordinary skill.

Regarding claim 30, the drawings of Feingold clearly show the peripheral part has a thinner thickness than the inner part and therefore would have higher flexibility.

Regarding claim 48, there is no unobviousness to provide a plurality of lens of different powers for different types of patients. A supplier of Feingold lens would inherently have to have a supply of different powers of lens in order to accommodate customers requiring different power lens.

Claims 26-28 remain rejected under 35 U.S.C. 103(a) as being unpatentable over the

references as applied to claim 5 above, and further in view of Choyce. It would have been obvious to one of ordinary skill in the art to further modify Feingold and shape the peripheral part with a generally concave portion as taught by Choyce to minimize obstructions and reduce the amount of material used.

(11) Response to Argument

Regarding the arguments to Feingold, appellant admits that Feingold already recognizes appellant's problem. Appellant's problem of spacing the posterior surface of the intraocular lens from the anterior surface of the natural lens is old and well known as taught by Feingold. Feingold has solved the same problem in the same way by providing proper spacing to allow for flow of body fluids and minimizes friction. It is not clear exactly how Feingold has solved this problem however, the drawings as noted above would appear to suggest just such a solution. The posterior surface of the intraocular lens always has a continuous concave surface such that there is no point of the posterior surface that would extend in a posterior direction. If the thicker part of the lens were to extend in a posterior direction rather than the anterior direction it would come into contact with the natural lens contradictory to the teaching of Feingold.

Wanders may not be an intraocular lens, however in the art of providing a lens with a continuous surface free of discontinuities and points of inflection without destroying the effectiveness of the lens, Wanders does teach providing a surface free of discontinuities so as to eliminate any disruption of the natural progression of light through the lens. In the art of shaping lens, which both Feingold and Wanders are similar. It is well known in the art to provide a lens surface free of discontinuities so that light does not reflect at the discontinuities. If not inherent in Feingold it does not appear to be an inventive step to make the surface of the lens free of

discontinuities.

Regarding claims 2-5, the continuous posterior surface of Feingold extend in a direction toward the lens periphery as claimed as shown in the drawings. The continuous posterior surface also extends towards the periphery within the area of the zonula-free natural lens as claimed and at least partially in contact with the ciliary sulcus and zonulas as shown in figures 26-27. Column 7, lines 36-38, state "the intraocular lens 102 rests at its periphery edge 104 at zonule attachment 106."

Regarding claims 6-8, 29 and 30, it is maintained that the peripheral part is flawlessly connected to the inner part. Claim 7 recites that the lens has a point of inflection within the supporting element which appears to be contradictory to claim 1 reciting that the supporting element and the optical part are free from points of inflection. If the instant invention can have points of inflection then any points of inflection in the prior art would comprehend the clams. The embodiment of figure 26 of Feingold teaches the peripheral supporting element has a radius of curvature less than the radius of curvature of the arc of the anterior surface 110 of the crystalline lens 112. Since the radius of curvature is less at the support part then it would broadly diverge towards a plane perpendicular to the optical axis. Regarding claim 30, since the optical part of the lens is thicker than the support element, the support element would have a higher degree of flexibility.

Regarding claims 9-19, the specific dimensions of the lens are an obvious consideration dependent on specific practical intended use well within the realm of the artisan of ordinary skill. Each individual person would require different optical characteristics for each lens. Finding the optimum dimensional characteristics of the lens for each person would be found through routine

experimentation.

Regarding claim 25, figure 27 of Feingold shows the support element extending only as far as the zonulas and therefore would be less than the average diameter of the ciliary sulcus.

Regarding claim 31, since the periphery of the lens extends to the ciliary sulcus there would be no edge glare. Regarding claims 32 and 33, specific dimensions of the lens and specific optical power of the lens is as noted above well within the realm of the artisan of ordinary skill.

Regarding claim 48, any supplier would inherently have to have a supply of suitable variety of optical powers. There would be no unobviousness to provide different powered lens for different patients.

Regarding claims 26-28, the two separate diametrically opposite symmetrical parts with a concave indentation is clearly shown at 14 in Choyce and an obvious provision in Feingold to minimize obstructions and reduce the amount of material used.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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ddd
March 17, 2004

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